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The roles of non-state actors in climate change governance: understanding agency through governance profiles

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Abstract Globalization processes have rendered non-state actors an integral part of global governance. The body of literature that has examined non-state actor involvement in global governance has focused mainly on *whether* and *how* non-state actors can influence states. Less attention has been paid to the comparative advantages of non-state actors to answer questions about agency across categories of non-state actors, and more precisely what governance activities non-state actors are perceived to fulfil. Using unique survey material from two climate change conferences, we propose that different categories of non-state actors have distinct governance profiles. We further suggest that the different governance profiles are derived from particular power sources and that agency is a function of these profiles. The study thereby contributes to a strand in the literature focusing on the authority of non-state actors in climate governance and broadens the methodological toolkit for studying the "governors" of global governance.

Keywords Non-state actors · Agency · Climate change · Global environmental governance · Power sources

Abbreviations

BINGOs	Business and industry non-governmental organizations
COPs	Conference of the parties
ENGOs	Environmental non-governmental organizations
IGOs	Intergovernmental organizations
IPOs	Indigenous peoples' organizations

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LGMAs	Local government and municipal authorities
RINGOs	Research and independent non-governmental organizations
TUNGOs	Trade unions non-governmental organizations
UNFCCC	United Nations Framework Convention on Climate Change
YOUNGOs	Youth non-governmental organizations

1 Introduction

Globalization processes have rendered non-state actors an integral part of global governance.[1] Growing numbers of non-state actors participate in different steering activities, such as witnessed in the climate change area (Abbott 2012; Bulkeley et al. 2012; Nasiritousi and Linnér 2014; Schroeder and Lovell 2012). With the international climate change negotiations continuing to deliver inadequate commitments by states (UNEP 2013), non-state actors are expected to play a more pronounced role (Andonova et al. 2009). The literature suggests a wide range of governance activities for non-state actors (Albin 1999; Hjerpe and Linnér 2010).

Scholars examining non-state actor involvement in global governance have hitherto not adequately examined *which* non-state actors are most successful in exercising agency in different areas of global governance, and more precisely how some actors are perceived as authoritative in different roles. With global governance being characterized as fragmented and increasingly complex, it is important to examine the sources and levels of agency for different actors across governance activities (Avant et al. 2010; Bulkeley et al. 2012; Haas 2004).

In this paper, we argue that greater attention needs to be directed to the comparative advantages of different non-state actors across governance activities. While acknowledging that non-state actors are not a homogenous group, many studies either discuss the role of non-state actors in general terms, or generalize based on case studies of one non-state actor category (Betsill and Corell 2001; Fisher and Green 2004). This implies that systematic comparison of perceptions of agency across non-state actors is largely lacking (Bulkeley et al. 2012). Furthermore, the role of other actor categories—such as municipal associations, indigenous groups, and trade unions—has received less attention. This is significant as non-state actors play a range of roles and, according to Keck and Sikkink (1999: 99), "to understand how change occurs in the world polity we have to unpack the different categories of transnational actors, and understand the quite different logic and process in these different categories".

Our paper aims to analyse levels and types of agency for a cross-section of non-state actors. We do this through an exploratory study by examining perceptions among actors involved in climate governance of the key roles that different non-state actors play. We introduce the concept of "governance profiles" to facilitate analysis of how agency differs across non-state actor categories. We also develop a framework for understanding the comparative advantages of different non-state actors for receiving recognition for specific governance activities. This enables more systematic comparison of the perceived roles of non-state actors in climate governance and a more fine-tuned analysis of their sources of agency.

[1] Other terms used in studies are civil society actors, non-governmental organizations, or transnational actors. Here we use the term non-state actor to mean any group participating in global governance that is not a sovereign state, while excluding armed groups.

Using unique survey material from two consecutive Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) (2011–2012), we demonstrate that different non-state actors have distinct governance profiles. We further suggest that the governance profiles are derived from particular power sources and that agency is a function of these profiles. The study thereby contributes to the literature focusing on the authority of non-state actors in climate governance and broadens the methodological toolkit for studying the "governors" of global governance (Avant et al. 2010).

In the next section, we survey the literature on governance activities of non-state actors, with a particular focus on climate change. We present a framework for understanding how power sources, governance activities, and agency of non-state actors are interlinked. Section 3 presents our study design. Thereafter, we present findings from the surveys, examining what roles in climate governance are portrayed for a cross-section of non-state actors, and whether there are any differences between ego (own) and alter (other actors') perceptions. Subsequently we discuss what the results mean for understanding the comparative advantages of non-state actors in climate governance. In the concluding section, we discuss the implications of our findings for future research.

2 State of the art and theory

The international relations literature on non-state actors broadly agrees that they play an important role in global environmental governance (Andonova et al. 2009; Betsill and Corell 2001; Biermann et al. 2010). While much of the early literature was concerned with exploring whether non-state actors represent a challenge to state power (Mathews 1997), in recent years the focus has shifted to empirical documentation of their activities and examining their influence in international governance (Betsill 2008; Betsill and Corell 2001; Newell 2000). These "political entrepreneurs" (Keck and Sikkink 1999) are important players that carry out diverse roles, including information sharing; capacity building and implementation; and rule setting (Andonova et al. 2009). Non-state actors thus play diverse roles across the whole policy spectrum—from influencing policy makers to taking action independent of states.

The literature, however, suffers from at least two weaknesses. First, studies have mapped new participatory arrangements in environmental governance, but have focused less on explaining the distributive effects of greater non-state actor involvement. For example, studies that explore the influence of non-state actors in environmental governance tend to focus on influential environmental NGOs (Betsill 2008; Gulbrandsen and Andresen 2004) or business NGOs (Falkner 2010; Vormedal 2008) rather than on marginalized groups (Schroeder 2010). This means that there has been less focus on groups of non-state actors that may exert little influence on the same structural setting. This generalization of non-state influence risks providing a distorted picture of the successes of non-state actors in global politics. It also implies that few studies have examined the interplay between actors and which ones are more effective in exercising authority.

The second weakness is the focus either on non-state actor activities at the intergovernmental level (Betsill 2008) or on the networked governance side of the policy spectrum (Andonova et al. 2009). For instance, several studies examine issues of representativeness at the intergovernmental level rather than participation across the whole policy spectrum (Steffek et al. 2008). Not all non-state actors elect to participate at the intergovernmental policy level, but those that do often use their participation as a platform to advance their

work outside the intergovernmental arena. Thus, while procedures for participating in international decision-making are an important aspect of global democracy, it is also pertinent to examine what impact this greater participation has on agency across the whole policy spectrum among groups of non-state actors—including activities taking place outside the intergovernmental setting. We suggest that even with equal rules for non-state actor participation in international negotiations, differences between non-state actor categories means that their participation leads to different capacities in exercising authority.

In short, to date, we lack systematic comparisons of governance activities across groups of non-state actors and across the whole policy spectrum. Particularly, we lack frameworks to understand why different actors may have a comparative advantage at different stages of the policy spectrum. This raises questions about what actors exercise agency at different stages and why. This paper views agents as actors with authority, i.e. those with legitimized ability to influence the outcome of events (Dellas et al. 2011; Hall and Biersteker 2002). Many actors can participate in environmental governance, but only some will be authoritative in the activities that they carry out. A pertinent question is therefore how agency is configured in particular policy domains (Biermann et al. 2010). While the previous literature has highlighted that non-state actors can obtain legitimized power either through delegation or through recognition (Dellas et al. 2011), much of the empirical attention has been on delegation and principal–agent relationships (Avant et al. 2010). In contrast, we favour a more dynamic interpretation of agency. By linking different sources of power and the element of recognition, we argue that agency can be understood by studying the different roles that actors are perceived to perform. In the next section, we present a framework for understanding how different sources of power, governance profiles, and agency are linked.

2.1 Understanding agency of non-state actors in global environmental governance

Non-state actors represent a range of interests and discourses. Their activities take place at different levels—ranging from local to global. However, we know relatively little about how non-state actors are turned into agents by virtue of their authority. Most commonly, agency is understood as a function of unequal knowledge of rules, access to resources, and differing levels of transnational connectivity and geopolitical status (Fisher and Green 2004; O'Neill et al. 2004). The focus has thus mainly been on factors endogenous to individual organizations. We suggest, however, that agency can also be a function of the role that different non-state actors are perceived to play at the group level.

In this paper, we propose that different categories of non-state actors have distinct governance profiles and that these can vary in strength from strong to weak. By governance profile, we mean a systematic measure of the roles a category of non-state actor is attributed in (climate) governance. This attribution involves both ego and alter perceptions. A governance profile is thus the combination of governance activities that a category of non-state actor has gained recognition for, which is an indication of agency for that actor in particular governance activities.

In this section, we survey the literature in order to elaborate an analytical framework to analyse the agency of non-state actors in climate governance. Based on the review, we suggest that the different governance profiles are derived from particular power sources and that agency is a function of these profiles. Specifically, we suggest that different types of non-state actors have different power sources, giving them comparative advantage across the policy spectrum, contributing to them gaining recognition for specific governance activities, and thereby shaping their governance profiles. These profiles allow us to

compare agency across different types of actors as the profiles highlight activities for which actors have gained recognition. Below we examine factors pertaining to the sources of power of different types of non-state actors and the activities that they can be expected to have a comparative advantage in, given their power sources.

While non-state actors often lack traditional forms of political power/authority (legislative and executive), the literature has outlined their alternative sources of power. The key skills and resources that non-state actors possess have been identified as deriving from their intellectual, membership, political, and financial bases (Gulbrandsen and Andresen 2004: 58). More specifically, the different sources of non-state actor power are believed to include knowledge and information (Betsill and Corell 2008; Keck and Sikkink 1999); economic resources and position in the global economy (Falkner 2010; Levy and Newell 2000; Newell 2000); organizational capacity, transnational networking and mobilization capacity (Falkner 2010); and legitimacy (Gough and Shackley 2001).

Thus, we can identify a number of power sources. Based on Keck and Sikkink (1999: 95) and Boström and Tamm Hallström (2010: 43), we build a typology of power sources used by non-state actors to gain authority in global governance: *symbolic* (legitimacy/ability to invoke moral claims), *cognitive* (knowledge, expertise), *social* (access to networks), *leverage* (access to key agents and decision-making processes), and *material* (access to resources and position in the global economy) powers.

Different non-state actors may wield these types of power sources to different strengths and in different combinations and can thus be expected to place greater emphasis on certain activities and roles. We adapt Albin's (1999) typology of NGO activities and propose nine key dimensions of non-state actor governance activities: influence the agenda, propose solutions, provide information and expertise, influence decisions and policy makers, awareness raising, implement action, evaluate consequences of policies and measures, represent public opinion, and represent marginalized voices. This categorization shows that non-state actors can participate in governance at multiple levels both indirectly (by influencing other actors) or directly (by making their own steering decisions) (Biermann et al. 2010).

While some power sources may be associated with particular governance activities (for instance, cognitive power is expected to be associated with providing information and expertise and evaluating consequences of policies and measures; and leverage power with influencing the agenda and decisions and policy makers), we suggest that it is the combination of power sources and their relative strengths that give non-state actors a comparative advantage in certain governance activities. In other words, depending on the combination of power sources held by a certain category of non-state actors, the roles they have in environmental governance and, consequently, what shapes their agency is expected to differ.

For example, because of the material and leverage powers of business and industry groups (Falkner 2010), they can be expected to be particularly strong on influencing decisions and policy makers. While this may also be the case for larger environmental NGOs, in general, environmental NGOs draw strength from their cognitive and social powers because of their issue-specific focus and usually large membership and mobilization capacity (Betsill 2008). These types of membership organizations can also use symbolic power if they are seen as representing public opinion that is not represented elsewhere, such as adding a voice for the environment or future generations (Gough and Shackley 2001).

Symbolic and social powers may also be the main strengths of indigenous groups and trade unions. However, as they represent specific communities and possess knowledge on particular issues, this may hamper recognition from the wider non-state actor community. Groups where cognitive power is one of the key power sources are academic NGOs and

intergovernmental organizations (IGOs) (Gough and Shackley 2001). These organizations can draw on their knowledge and skills to introduce new ideas and develop creative policy solutions. Because of their connections at different levels of governance and their financial strength, IGOs also wield leverage and material powers and can therefore be expected to take implementation action in member countries (Biermann and Siebenhüner 2009).

Thus, disparate strands in the literature lead us to expect that different combinations of power sources give categories of non-state actors comparative advantages for different activities and hence different governance profiles. While actors may be strong in certain areas, they may be weaker in others. What matters for their empowerment is that they receive explicit or implicit recognition for the roles that they claim to fulfil (Andonova et al. 2009; Dellas et al. 2011). By studying the combination of governance activities that a category of non-state actor is perceived to perform by other actors, we can thus obtain a richer picture of how agency differs between actor groups.

2.2 Identifying roles of non-state actors in climate governance

In addition to the UNFCCC and nation states, non-state actors are instrumental in shaping the contours of climate governance, including through private, hybrid, networked, and community-based governance (Abbott 2012; Andonova et al. 2009; Dellas et al. 2011). Climate governance therefore offers a rich test case for our empirical study.

While we do not attempt to systematically explore the agency of non-state actors in climate governance, we seek to undertake a first step to map perceived roles of different non-state actors. Specifically, we focus on the official categorization used by the UNFCCC, which divides non-state actors into the following constituency groups: business and industry non-governmental organizations (BINGOs), environmental non-governmental organizations (ENGOs), indigenous peoples' organizations (IPOs), local government and municipal authorities (LGMAs), research and independent non-governmental organizations (RINGOs), trade unions non-governmental organizations (TUNGOs), farmers and agricultural NGOs, women and gender, and youth (YOUNGO).[2] Another group of observer organizations is constituted by IGOs, such as the World Bank, OECD, and UNEP.

The use of governance profiles for these non-state actor categories allows us to explore the relative agency of non-state actors that goes beyond previous analyses of agency among individual non-state actors. While being well aware that there are large differences within these categories, organizations align themselves with a constituency when becoming an observer to the UNFCCC. Constituencies are thus intended to be loose groups, which represent "diverse but broadly clustered interests or perspectives" (UNFCCC 2011). The different constituencies should therefore not be considered monolithic blocks; rather, they represent a broad spectrum of interests which also often conflict. Nevertheless, they have enough commonalties to be organized as constituencies. More importantly for our analysis, they are viewed as a constituency with commonalities by other actor groups.

3 Data and measures

To compare perceptions of the different roles of non-state actors in climate governance, our paper uses questionnaire data from two consecutive UNFCCC COPs: COP17/CMP7 held in South Africa in 2011 and COP18/CMP8 held in Qatar in 2012. We also utilize non-

[2] http://unfccc.int/files/parties_and_observers/ngo/application/pdf/constituency_2011_english.pdf.

state actor submissions to the UNFCCC on why their participation should be enhanced to explore self-perceptions.

This paper thereby offers a novel approach to the study of non-state actors, which has to date been dominated by case studies. While case studies offer detailed analysis of particular roles of non-state actors, they are limited in scope due to the sheer number of cases and wealth of information. For the purposes of mapping roles of a range of non-state actors, we therefore employ the methodology used in much of the good governance literature, where perceptions of experts and public opinion are relied on to assess degree of corruption, freedom of expression, and transparency of countries around the world (cf. Transparency International and Freedom House). The questionnaire measures perceptions of which actors play the most significant role for a range of governance activities to capture the element of recognition of authority (Dellas et al. 2011), or as Kaufmann et al. (2008: 3) state, "perceptions matter because agents base their actions on their perceptions, impression and views".

The questionnaire was conducted by the *International Negotiations Survey* and surveyed participants in: fourteen official side events during COP17, producing a total of 384 responses; and fourteen official side events during COP18, producing a total of 451 responses. We decided to target COP participants with relatively high familiarity of non-state actor activities, for which side events provide a good venue (Lovell 2007; Buhr and Hjerpe 2012; Schroeder and Lovell 2012). Since our respondents are relatively actively involved in international policy making on climate change, they possess valuable insights on the governance activities of a range of non-state actors. On the other hand, there is a risk that respondents overestimate the importance of the activities that different non-state actors perform. Nevertheless, comparing the responses of non-state actors with state actors on our survey question (as in Table 1) is likely to provide a nuanced picture. Moreover, here we are more interested in the relative rather than absolute figures across the non-state actor categories, as these provide us with insights on the recognition of governance profiles for the different actor types. While missing the voices of non-accredited organizations, the COPs nevertheless provide a heterogeneous sample of actors from all major world regions as this is one of the largest meeting venues for actors participating in climate change work.

The question that we will analyse here reads: "Which of the following observer organizations, if any, does in your view play the most significant role in the areas listed below" (see "Appendix"). The non-state actor categories were chosen based on the official constituencies, but due to space constraints in the survey, we did not include the more recently added constituencies: women and gender, youth, and farmers. There was also a response option for respondents who perceived none of the observer organizations as playing a significant role for any particular governance activity. For the options of governance activities performed, we use our nine dimensions of non-state actor activities from above. In the context of climate change, we distinguish between taking action on mitigation and taking action on adaptation as these actions differ in their nature and scope. Our survey therefore outlines ten governance activities (see "Appendix").

In total, we received 542 valid responses for this survey item, evenly spread between the COPs (276 answers from COP17 to 266 answers from COP18 participants). Out of these, 417 respondents were non-state and 125 were state actors. We were only able to discern the following minor differences between COP17 and COP18 responses: more respondents indicated that ENGOs influenced the agenda (7 % point increase from 13 %); less respondents indicated that business organizations influenced the agenda (down 6 % points from 35 %) and provided solutions (down 7 % points from 19 %), and that LGMAs took action on climate adaptation (down 7 % points from 41 %). We therefore merged the samples into one large sample. While not representative for the average COP participant,

Table 1 Self, party, and other observer perceptions of non-state actors' roles, %

	ENGO			BINGO			RINGO			IGO			LGMA			TUNGO		IPO		None	
	S	P	O	S	P	O	S	P	O	S	P	O	S	P	O	P	O	P	O	P	O
Influence agenda	17	19	15	21	25	37*	10	11	8	30	36	27	10	6	2	2	1	0	1	9	9
Influence decisions	16	14	16	32	27	43*	18	9	7*	24	24	17	7	12	4	3	2	1	1	11	8
Propose solutions	35	12*	17*	52	13*	10*	52	42*	30*	24	11*	9*	20	3*	5*	1	0	1	3	15	7
Information and expertise	18	12	10*	12	3	4	79	64*	65*	25	14	8*	5	2	1	1	1	2	2	6	2
Evaluate consequences	13	7	14	9	6	2	55	53	53	27	18	14*	18	5*	5*	2	2	1	2	10	4
Mitigation action	22	15	9*	63	24*	26*	2	1	1	17	16	15	68	27*	22*	1	0	1	2	17	13
Adaptation action	21	15	12*	26	7*	4*	3	3	2	21	15	16	54	34*	38*	1	1	7	9	16	10
Raise awareness	79	67*	74	3	3	1	6	3	4	6	7	4	12	6	6	1	2	3	3	12	5
Represent public opinion	55	44*	37*	2	2	3	8	5	3	4	10	5	32	11*	10*	7	4	8	9	16	20
Represent marginalized	18	24	17	0	1	2	3	1	0	2	4	3	7	2	2	3	4	53	62	12	14
n	120	125	295	53	125	362	84	125	331	50	125	365	20	125	395	125	408	125	409	125	415

Key: *ENGOs* environmental non-governmental organizations, *BINGOs* business and industry non-governmental organizations, *RINGOs* research and independent non-governmental organizations, *IGOs* intergovernmental organizations, *LGMAs* local government and municipal authorities, *TUNGOs* trade unions non-governmental organizations, *IPOs* indigenous peoples organizations. *S* Self, *P* Party, *O* Other observer perceptions. Asterisk (*) represents statistical significance between ego and alter perceptions at the $p < .05$ level

the sample is nevertheless heterogeneous enough to capture respondents with different backgrounds and from most parts of the world.[3]

Respondents who did not respond to this survey item were spread equally across the different categories of participants. We left out invalid responses, commonly resulting from respondents indicating too many response options. These responses were analysed separately and compared with the valid responses. While differing in absolute numbers, we were unable to find any differences between the patterns of the answers; that is, the roles identified as strong in the valid responses are the same as among the invalid responses.

To compare ego perceptions and other observer perceptions, we have included observer categories for which the number of responses exceeded twenty. This means that we are able to present ego perceptions for ENGOs (120 responses), BINGOs (53 responses), RINGOs (84 responses), IGOs (50 responses), and LGMAs (20 responses).

We also utilized another source of material for identification of ego perceptions of roles performed in climate governance. We identified what roles the non-state actors stress in their submissions to the UNFCCC on the matter of why their participation should be enhanced. Most submissions were made by BINGOs and ENGOs, however, which means that there is little information from the other non-state actor categories. Nevertheless, the submissions can provide insights into how these two groups of actors wish to portray their roles in climate governance. These ego perceptions will therefore be compared to the ego perceptions obtained from the questionnaire to examine the validity of the latter.

In sum, while other works have explored the role of different non-state actors vis-à-vis states (e.g. Higgott et al. 2000), this methodology allows us to explore governance profiles of non-state actors relative to others and study the element of recognition that is important for distinguishing an actor from an agent.

4 Governance profiles of non-state actors in climate governance

We first examine how participants perceive the key roles of seven categories of non-state actors in climate governance, i.e. their governance profiles. Next, we divide the respondents into three categories—own, state parties, and others—to see how categories of respondents perceive the roles of different non-state actors and, in the case of BINGOs and ENGOs, comparing them to how they describe themselves in their submissions to the UNFCCC. Particularly, it is interesting to examine whether the actors' self-perceptions of their constituency match those by state parties and other actors since this provides an indication of the level of recognition of legitimized authority in state-led and more governance-oriented steering forms (e.g. Andonova et al. 2009).

Figure 1 shows COP side-event participants' perceptions of the roles performed by seven categories of non-state actors in climate governance. The responses reflect the percentage of respondents who indicated a non-state actor as being most significant for each governance activity.[4] Our data show that the non-state actors largely are niched towards different roles, with the full spectrum of governance activities being covered. While the governance profiles confirm many of our expectations based on findings in the

[3] A complete description of the respondents is available from the authors upon request.

[4] Using a Student's *t* test to test whether the share of respondents recognizing an activity for a non-state actor category differs from the average (12.5 %) with a sample size of 542, and the shares distributed as in Fig. 1 renders a very small confidence interval. This means that virtually all differences are statistically significant.

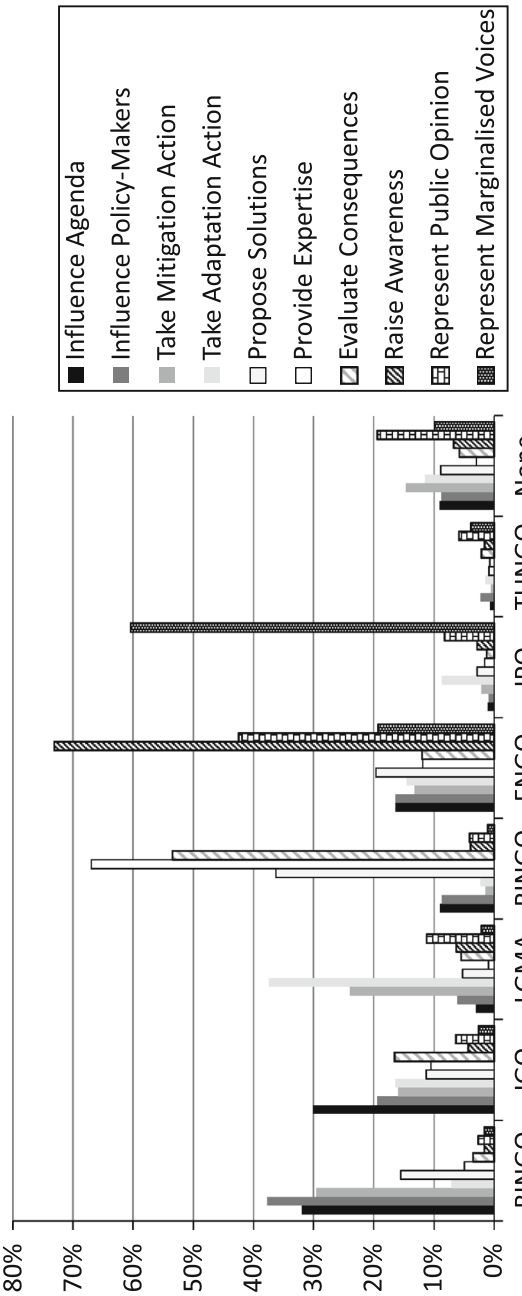

Fig. 1 COP side-event participant perceptions of the roles performed by various non-state actors in climate governance (percentages). *Key*: *BINGOs* business and industry non-governmental organizations, *IGOs* intergovernmental organizations, *LGMAs* local government and municipal authorities, *RINGOs* research and independent non-governmental organizations, *ENGOs* environmental non-governmental organizations, *IPOs* indigenous peoples organizations, *TUNGOs* trade unions non-governmental organizations

non-state actor scholarship, they provide additional insights, particularly regarding the relative strengths and weaknesses of the seven non-state actor categories compared to the others. In this respect, the governance profile represents a novel way to study the comparative advantages of non-state actors along the policy spectrum.

Figure 1 shows distinct governance profiles for each of the actors. Except for ENGOs, which have a relatively strong governance profile in most activity categories, the figure shows that most governance profiles show strength in roles associated with either (1) influence and action, (2) ideas and expertise, or (3) awareness raising and representation, but not all three combined.

The governance profile of ENGOs stands out as particularly strong on raising awareness and, more surprisingly, representing public opinion. This could be an indication of the strong symbolic and social powers of ENGOs as they can draw upon a large membership base. While receiving relatively higher ratings across all governance activities, which could be read as a general recognition of ENGOs as an important actor in climate governance, it is surprising that their governance profile is relatively weak in setting the agenda or influencing policy makers; less than half of the share assigned to business organizations. Based on previous studies (e.g. Betsill 2008), we would expect a larger recognition of ENGOs' roles in setting the agenda and influencing policy makers. Perhaps this reflects a focus in the literature on the most influential ENGOs.

BINGOs' governance profile is characterized by perceptions of being particularly strong in influencing decisions, policy makers and agenda setting, and taking mitigation action. BINGOs are perceived to take less action on adaptation, which may reflect that large parts of the business community were slow to engage in adaptation (Agrawala et al. 2011). The weakest part of BINGOs' governance profile is the role of raising awareness and representing marginalized voices. This governance profile reflects their constellation of material and leverage powers, as well as their perceived low level of symbolic power as their main focus is not on global public goods but private interests (Boström and Tamm Hallström 2010).

The governance profiles of RINGOs is particularly strong on ideas and expertise, as they are perceived as having strong roles in providing expertise, evaluating consequences, and proposing solutions. This governance profile reflects their cognitive power. Their less profound roles are implementation and interestingly also representing marginalized voices.

The LGMA governance profile stands out as it shows its strongest side in taking action, particularly in the field of climate adaptation. As representatives of local constituencies with some degree of political and economic powers, LGMAs can generally be viewed as having high symbolic and leverage powers as well as material power and are therefore perceived to be at the forefront of implementing climate change policy. What is surprising, however, is that these powers are not associated with influence and that their symbolic power is not reflected in the role of representing public opinion on climate change, which is relatively low. The former may reflect LGMA's status in the intergovernmental negotiations as a constituency along with other non-state actors, even though at the domestic level they have a more official status.

Like ENGOs, IGOs' governance profile was relatively strong overall, except for awareness raising and representation. But like BINGOs the IGO governance profile is characterized by perceptions of being particularly strong on influencing the agenda, decisions, and policy makers. Thus, by virtue of their cognitive, leverage, and material powers, IGOs are perceived as being important in the decision-making processes. This view is in line with Barnett and Finnemore's (1999) thesis that IGOs exercise power independently of the way anticipated by the states that created them and that environmental bureaucracies are at the helm of managing global change (Biermann and Siebenhüner 2009).

For the two remaining non-state categories—TUNGOs and IPOs—fewer of our respondents seemed to have informed opinions resulting in more diffuse governance profiles. This may be because the respondents either did not know what activities these constituencies perform or believed that they did not fill any of these roles. The latter perspective would suggest that TUNGOs and IPOs have relatively weak governance profiles in climate governance. Nevertheless, for IPOs, representing marginalized voices is highly significant, which is in line with our expectations. IPOs are viewed as being particularly weak in influencing decisions and policy makers, which might be a reflection of their relatively low material and leverage powers. With regard to TUNGOs, the relatively stronger roles were found for representation, both of public opinion and marginalized voices.

Thus, our data indicate that raising awareness, providing expertise, and representing marginalized voices are strongly associated with one particular category of non-state actors (over 60 % indicated one actor category as playing the most significant role for these governance activities). Two further roles are also mostly associated with one non-state actor, namely RINGOs as evaluators (53 %) and ENGOs as representing public opinion (43 %). The other five roles, associated with influence, proposing solutions, and taking action, are less strongly associated with a particular category of non-state actors, indicating that actors with different governance profiles are recognized as important across these governance activities. Because the results present a cross-section of non-state actor roles, our study adds important nuances to our understanding of the relative strengths and weaknesses of different categories of non-state actors in climate governance.

4.1 Ego and alter perceptions of roles

We follow Arts' (1998) ego and alter perceptions and analyse how other actors' opinions about what role a particular category of non-state actor performs differ from the category's own self-image. This is necessary both to establish whether the non-state actors have rosy self-identities and whether the roles are mutually recognized, which is essential for agency (Andonova et al. 2009). We compared responses for three categories of participants: own actor, state parties, and rest of observer respondents. In Table 1, the 95 % confidence intervals vary from 11 % units (for the LGMA ego image) to 4 % units for the ENGO ego image; an asterisk (*) represents statistical significance between ego and alter perceptions at the $p < .05$ level. A significant party share would indicate recognition from state actors, and, consequently, of non-state agency on the state arena (e.g. intergovernmental level). A significant other share would indicate non-state agency on the non-state arena (e.g. transnational level). For TUNGOs and IPOs, there were too few respondents in the "own" category, and, accordingly, we only present the shares of parties and observers.

Table 1 shows non-state actors' roles from different actor perspectives. Overall we note that perceptions do not markedly differ between state parties and non-state actors other than on certain self-images. Our data suggest that all actors agree with the view that a key role for BINGOs is influencing decisions, for ENGOs is raising awareness, for RINGOs is providing information and expertise, and evaluating consequences, for IGOs is influencing the agenda, and for IPOs is representing marginalized voices. Our findings with regard to these roles are therefore likely to be fairly robust as ego and alter perceptions match relatively well, indicating a high level of recognition of authority for that activity from both the formal state and the non-state actor communities.

The self-perception of BINGOs of proposing solutions and taking action on climate mitigation and adaptation is not matched to the same extent by parties and other actors' views. This indicates that BINGOs themselves are likely to overestimate their agency when it comes

to these pertinent issues. For proposing solutions, the results suggest that BINGOs are not seen as an agent and, thus, that statements of the role of business in providing solutions to the climate change challenge have not affected perceptions. Such statements can be seen in the submissions by several BINGOs to the UNFCCC on how to improve the participation of business organizations, showing that these BINGOs view their roles as being focused on proposing solutions and implementing decisions. For instance, the International Chamber of Commerce writes that the role of BINGOs includes the "creation and deployment of technology, finance, investment, trade and capacity building, participating in international mechanisms and other approaches to promote mitigation and adaptation" (International Chamber of Commerce 2010). Similarly, the Business Council for Sustainable Energy proposes the creation of standing mechanisms for greater private sector engagement in international climate governance, which would consist of a high-level body for sharing expertise to negotiators to assist in their decision-making and a consultative body to aid in the implementation phase of the agreement (Business Council for Sustainable Energy 2010). Moreover, while BINGOs argue that greater engagement will add to the transparency and legitimacy of the process, the key focus is nevertheless on providing technical support and sectoral expertise in the negotiation and implementation phases.

We believe that these large discrepancies may arise from respondents perceiving the own organization as representative of the whole actor category, whereas the perceptions of other actor types are likely to be based on the aggregate/average actor type. Here, the party and other perceptions fit better with the activities of a general firm, whereas the business self-perceptions are more compatible with them being actively participating in international policy making on climate change. We also note that while BINGOs and parties share a similar perception of the extent of BINGO influence on the agenda (21 and 25 %, respectively), other actors view this as being more significant (37 %), perhaps indicating BINGO agency in this regard on the transnational level (Bulkeley et al. 2012).

Similarly, ENGOs are perceived by parties and other non-state actors as being weaker in proposing viable solutions and representing public opinion compared to their self-image. The ENGO submissions to the UNFCCC underscore that their key roles are to provide information to negotiators, increase legitimacy, and transparency, and to "improve the environmental and social qualities of the agreements reached" (World Wildlife Fund 2010). Some ENGOs, such as CAN International and Friends of the Earth, associate themselves with civil society in general and emphasize how they contribute in terms of ensuring "vibrant public participation" and promoting public support for climate action (Climate Action Network 2010; Friends of the Earth 2010). The main focus of their activities in global environmental governance is thus perceived as being advocacy rather than implementation.

RINGO's self-image of proposing solutions is matched by parties but not by others' perceptions of their role, even though the recognition of RINGO's role for providing solutions is the highest of all the non-state actors surveyed. This indicates high degree of agency at the intergovernmental level, whereas outside this confine, RINGOs are less likely to have an agency advantage in proposing viable solutions. For IGOs, on the other hand, their self-perception of providing information and expertise is not matched to the same extent by parties and other actors' views. The self-images of LGMAs on their role in proposing solutions, taking action on climate mitigation and adaptation, and representing public opinion are also higher than the party and other perceptions. However, as this group was the smallest sample with an ego perception, these figures should be interpreted with care. Overall, therefore, there appears to be a relatively high congruence between ego and alter perceptions, indicating general agreement on which categories of non-state actors are recognized as authoritative for particular governance activities.

4.2 Discussion

The perceptions of roles of non-state actors in our study indicates the level of recognized authority across governance activities among those that work with climate change issues at different levels. One interesting observation is that very few government representatives (parties) indicate that none of these non-state actors play a significant role for the governance activities presented in the questionnaire. Over 60 % of parties indicate that ENGOs play a significant role in raising awareness of climate change among the public and that RINGOs provide information and expertise. Our figures indicate that government representatives perceive important roles for non-state actors in climate governance, which is in line for instance with the finding of Gough and Shackley (2001) that NGOs and epistemic communities have become important partners to states in the area of climate change.

Moreover, the governance profiles presented above allow for comparisons of agency associated with different actor categories in climate governance. Our results indicate that some actors and particular combinations of power sources are seen to be most authoritative at different points along the policy spectrum. For instance, influence and action appears to be associated with actors that possess *leverage* and *material* powers (BINGOs and IGOs), ideas and expertise with *cognitive* power (RINGOs), and awareness raising and representation with *symbolic* and *social* powers (ENGOs and IPOs). All of these categories represent different forms of agency in that they can be used to advance non-state interests.

The governance profiles also allow for a cross-comparison of non-state actors and indicate that nuances in the combination of power sources can affect agency across the policy spectrum for different actors. For example, the relatively high level of recognition for a range of governance activities for ENGOs may stem from the combination of broad power sources. Specifically, the larger ENGOs have considerable financial strength, contacts with decision-makers, and established media strategies, giving them both leverage and material powers. Because they are well organized, they could be expected to be perceived as being more influential. Nevertheless, the financial strength of some NGOs is not of the structural nature as that of BINGOs, for example, since businesses are expected to contribute financial resources to fight climate change on a scale that is not applicable to ENGOs. One interpretation of these results is that influencing the agenda and decisions is perhaps less associated with endogenous resources than with structural power that can be employed to affect change. Given their strong symbolic and social powers at the group level, ENGOs are instead better recognized for their work in awareness raising and representation.

Another interesting aspect of ENGOs' governance profiles is that their weakest part is perceived to be providing expertise and evaluating consequences of policies and measures, which could be considered surprising, given ENGOs' activities to spread expert knowledge on environmental issues and initiatives. Perhaps this reflects a notion that they are conveying other actors' expertise rather than that generated within their own organizations. In fact, the self-assessment of the ENGO's role as expert knowledge providers indicates that this is not a primary activity. This may be related to the use of expert knowledge in decision-making, in line with the finding of Shapin (1996) and other sociologists of science that the more expert knowledge, in particularly scientific, is perceived as being disinterested and unbiased, the more valuable it is an argument for certain political actions. While ENGOs may possess considerable cognitive power, it is not of the scientific and balanced kind associated with RINGOs, and therefore, they are not recognized for providing information and expertise.

Interestingly, the ego perceptions regarding the activity proposing solutions exceeded alter perceptions for all five categories of non-state actors, except for parties' recognition

of RINGOs as proposing solutions. The higher ego perceptions of ENGOs, BINGOs, RINGOs, IGOs, and LGMAs regarding their roles as proposing solutions is in line with Lovell (2007) who found that participants in official side events describe themselves as avant-garde and solutions-focused. The overestimation of taking action on mitigation is confined to two actors: business organizations and LGMAs. Their ego perceptions are around two-thirds whereas the party and other observer perceptions is merely one-quarter of the responses. Whether this is a reflection of an information gap, an implementation gap, or perceiving the own organization as representative of the whole category is a question worth examining in future studies.

Overall the findings imply that power asymmetries are not only based on access to financial resources or structural inequalities based on gender, class, and race at the organizational level as often highlighted in the literature (cf. Fisher and Green 2004), but may also be dependent on different governance profiles.

5 Conclusion

Non-state actors perform a number of tasks in environmental governance. We have used results from a survey of participants in two recent international climate change conferences to examine how perceptions about the roles of non-state actors differ across the policy spectrum. We show that different categories of non-state actors are perceived to play distinct roles in climate governance. Their governance profiles reveal how actors have comparative advantages in different governance activities, and our analytical framework links these activities to different combinations of power sources and ultimately to their agency. The paper thereby contributes to our understanding of the complex web of authority in global climate governance that is characterized both by cooperation and competition over policy space (Abbott 2012). Hence, it provides a first step for building a clearer map of the possible division of labour between different actors as governance becomes more decentralized and fragmented (Haas 2004).

While the governance profiles show that certain activities are strongly associated with one particular non-state actor category, such as raising awareness (ENGOs 73 %), providing expertise (RINGOs 67 %), and representing marginalized voices (IPO 60 %), the results also show that no single category of non-state actors is strong across all governance activities. This indicates that there is room for cooperation across the categories in order to achieve greater impact across the policy spectrum. The trend towards partnerships in climate governance may reflect this insight.

Further, the governance profiles derived from our data fit well with how they are depicted in the literature. However, governance profiles also advance current understandings by providing insights into what types of actors and resources are recognized as authoritative along the policy spectrum and thus contribute to understanding the development of non-state actors' agency. Moreover, they identify gaps in relation to the actor's own perception, indicating different factors that may impede agency.

The paper also has implications for the future research agenda. While the questionnaire methodology provides a means to map perceptions of roles, more qualitative methods are likely to be needed to examine the link between power sources, governance profiles, and agency more closely, and to move beyond aggregate categories of governance activities in order to provide more fine-tuned insights on agency in particular contexts. The framework presented above can guide future research in this direction. A next step would involve looking at the outcomes of participation to understand the link between perceived and

actual roles. Another area for further research is to what extent organizational-level factors determine non-state actor agency compared to group-level factors.

The focus of this study has been on climate governance. Nevertheless, it is likely that the results can be applied to other contexts and policy areas. Future studies can build on the results presented in this paper to explore what different governance activities among groups of non-state actors say about how agency shifts over time and what this means for governance outcomes in terms of efficiency and democratic legitimacy. A multitude of methodologies are therefore called for to examine questions of agency, legitimacy, and authority in global governance. This study has provided a tentative model to inspire new research in this area.

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Appendix

Survey question from the *International Negotiations Survey*

7. Which of the following observer organizations, if any, does in your view play the most significant role in the areas listed below.

Please tick one box on each line.	Business & industry groups	Research organizations	Environmental NGOs	Municipalities & local authorities	Trade unions	Intergovernmental organizations	Indigenous peoples' org.	None of these actors
Influence the international climate change agenda								
Propose viable solutions to climate change								
Provide information and expertise								
Influence decisions and policy-makers								
Raise awareness of climate change among the public								
Take actions on climate change mitigation								
Take actions on climate change adaptation								
Evaluate consequences of policies and measures								
Represent public opinion on climate change issues								
Represent marginalized voices								

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